wondered if he should give it all up again. There was of course the security . . . but then again. Stephen had completed his vocational training but instead of joining a practice had arranged to go to sea as a ship's doctor. Sharon, mysterious Sharon, had also completed vocational training. And then she had sold her house to finance reading English at Oxford. I liked Sharon.

That morning our group of four met again with Jayne. We read out our new improved features to each other and said nice things about them. We were all I think heartily sick of them, and so I suspect to her eternal credit was Jayne. Later Tim and Harvey discussed the various outlets for medical writers and imparted a lot of hard won experience about how to submit copy for publication, about acceptances and rejections, about not arguing with subeditors, and about money. Harvey warned of the hazards of using the device of irony in a piece and mentioned an instance of this from his own experience. Tim, the authentic journalist, exhaled cigar smoke thoughtfully.

Over our last lunch the conversation veered naturally enough away from journalism. Peter, a pensive senior house officer, discussed screening with another preregistration devotee, the ethereal flashing eyed Nicola. But there were other themes, too. Sarah from Kent, for instance, a newly qualified houseperson whose ancient transport had overheated in the Dartford Tunnel en route. Or suavely mischievous general practitioner Paul who had represented *The Times* during the press conference or the bonny Paula, inner city general practitioner. And what of Colin, former general practitioner and now defence society strategist? The stories he could tell and didn't. I told Helen Parker, the course organiser, how much I had enjoyed the weekend and meeting the *News Review* staff but the editor appeared to summon us from table to the final debriefing.

The *News Review* crew arranged themselves centrally on four chairs, their backs to us all, to hear our impressions and suggestions about the course. The best suggestion was that the next course should include a mock editorial meeting—how the decisions are made. The wittiest came from playwriting African senior house officer, Dr Charles Easmon, alias Charlie, who said that we should all get a diploma. Tim Albert hijacked a paper doyley, pinned it to the offender, and declared him Man of the Match, an uncontested decision.

Tim handed us each a card with four spaces. We were each required to target four periodicals in which we would attempt to publish articles within about the next three months. The purpose was to evaluate the course outcome in terms of the acid test—publication. In one of the spaces I wrote: "*British Medical Journal—BMA News Review* Medical Journalism Course." Tim wandered round collecting the cards, picking up mine as he passed. He returned, advancing on me waving my card slowly from side to side. "They'll never publish it," he said. I replied boldly that it was a challenge. But he had turned away and trod slowly towards other combatants who were idly waving their cards. He stopped suddenly as if struck by a thought, and turned again. He pointed a finger at me. "If they do," he said sternly, "make sure you give *BMA News Review* a plug." I said I'd think about it.

On the way home, through the familiar landmarks of the M11, I thought about the events of the weekend. Of our brief but happy band, of the splendid efforts of the *News Review* team, of the high jinks of the press conference, and, it must be owned, of the mysterious Sharon. I wondered did it all really happen? In the rear view mirror I saw lying on the back seat, the standard green of the BMA press folder, inscribed "BMA. The prescription for a better future in British Medicine." Gently edging their way out were the carefully prepared *News Review* course notes. So of course it did all happen. I smiled to think that I could have doubted it.

Sulphur or sulfur? A tale of two spellings

C A Michie, D R Langslow

It all began with a computerised spelling program—every "sulphur" became "sulfur" at a single command. English journal to American journal, one etiquette to another without any great sense of loss or mutilation but with a strong sense of difference. Unlike other Americanisms, such as center, color, edema, and jello, this variation in spelling is extremely old. An initial glance into an etymological dictionary gives a dry derivation: the English word for sulphur is borrowed from Latin *sulpur, sulphur, sulfur*—that is, with three spellings—and may be traced through Old French *soufre*; Anglo-Norman *sulf(e)re*; and Middle English *soufre, solfre,* or *sulph(e)re*.[1] Further etymological excavation uncovers some unusual patterns.

University College, University of Oxford, Oxford
C A Michie, BM, *associate*

Wolfson College, University of Oxford
D R Langslow, MPHIL, *lecturer in latin philology*

Correspondence to: Dr C A Michie, Queen Elizabeth Hospital for Children, London E2 8PS.

Unclear origin

The word "sulphur" is of unclear origin. In Latin it is attested first in a work of the poet Ennius (239-169 BC). He used the adjectival derivative *sulpureus*, sulphurous, to describe the waters of the river Nar, modern Nera, in central Italy.[2] A search for the roots of the Latin word suggests that its proposed Indo-European etymologies are uncertain. Germanic words, such as Gothic *swibls* or Old English *swefel* for "sulphur," Armenian *ulp*, sun or ray, and Tocharian *salp*, burn, have all been called into play, but inconclusively.[3] We do not know the etymology of the Latin word.

We do know that it is not a Greek loan word. The Greeks called the yellow element *theion*[4] (note the use of "thiol" for sulphydryl groups today). Nor is it likely to have been borrowed from Sabine, a language of pre-Roman Italy, whence many Latin words supposedly are taken. Ancient authorities ascribe to Sabine the word "nar" (the name of Ennius's sulphurous river) as the name for sulphur. The alternative name for sulphur in English, "brimstone," has a Middle English origin, "biren," burn. The L *lapis ardens* also makes reference to this burning stone (L *ardere*, to burn). We see a similar naming principle in the Zulu and Ndebele languages of Africa: *babula* refers to the substance that burns. In sum, however, the etymology of the English "sulphur" can be traced no further back than Latin.

To return to the Latin spelling used by writers such as Ennius and Virgil, the oldest form of the word in Latin may be inferred with some certainty from the manuscripts as *sulpur*, written and pronounced with a plain p. Further evidence for this form comes from the Romance dialects of remote alpine regions in which the plain p is found in this word—for example, Old Provençal *solpre* and Friulian *solpar*. So *sulpur* pro-

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Fourteenth century Latin script, depicting a man digging for sulphur, or sulfur. (Plant in foreground is common houseleek.)

nounced with a [p] is the oldest Latin form. How do the more recent spellings arise? The most influential factor was probably exposure of the Romans to the Greek language. Before about 150 BC the letter sequences ph, ch, and th are found rarely in Latin other than in names of Etruscan origin. Republican Latin made neither written nor (probably) phonetic distinction between the [p] and the [ph] written in Greek. The phonetic contrast exists, but without meaning, in modern English: compare the [p], [k], and [t] in spin, skin, and sting and the [ph], [kh], and [th] in pin, kin and tin. In the second set the initial consonant is strongly aspirated—try it in front of a candle—thus a Latin speaker would have made no distinction between the Gk *pantes*, all men, and *phantes*, having said.

Insidious Greek

In time, however, Latin came to reflect in its spelling the Greek distinction between plain and aspirated consonants, and the combinations ph, ch, and th became common in inscriptions from the first century AD onwards. Indeed the letter h began to appear in non-Greek words, where it had no right to be, and innocent Latin *p*, *c* and *t* acquired an *h*. L *sepulcrum*, tomb, became *sepulchrum; pulcer*, pretty, became *pulcher*, and *sulpur* became *sulphur*. Catullus wrote with scorn of the Roman Arrius, who suffered from an obsessional aspiration mania.[5] Cicero used some popular forms, such as *pulcher*, but would not tolerate aspirations in *sepulcrum, lacrima,* or *corona*—he "allowed his ears to decide" over the selection.[6] Whether the spelling *sulphur* reflects a real change in the pronunciation remains an open question, but the addition of the *h* seems to be a fashionable Latin linguistic decoration.

In a third century inscription from Agrigento in Sicily first appeared the spelling "sulfur" (CIL X 8044). It requires us to accept a pronunciation with [f]. The development in pronunciation from [p] to [f] is odd. Normally the Latin sequence *-lp-* is continued as *-lp-* into the Romance languages (for example, L *palpare*, to feel, and French *palper*). Indeed, it is only in the languages of the remote alpine regions mentioned above that the old sequence *-lp-* has been fossilised in the forms *solpre* and *solpar*. In only one instance is the *-lp-* to *-lf-* sound change observed, namely in L *colfus* for (a) bay of the sea, (b) vagina, and (c) type of ulcer. The word was borrowed from Gk *kolpos*, and its reconstructed common Romance form, *golfus*, is the source of the Romance words for "gulf."

How are we to account for the change from [p] through [ph] to [f]? Three distinct possibilities suggest themselves. The Greek sound change of [ph] to [f] that occurred in the first century AD[7] is relevant to all three. Our hypotheses are as follows: (a) the word was perceived by Latin speakers as a Greek word and was accordingly pronounced after a certain date with [f] in the manner of all later Greek loan words with [ph]; (b) the word actually took part in the Greek sound change—that is, its pronunciation was changed by Greek physicians who dominated the medical world of antiquity; (c) the word was subject to a folk etymology whereby its second syllable, *-p(h)ur*, was confused with the Greek word element *-phoros*, carrier, and therefore replaced by the contemporary Greek form with [f].

Persistence of "sulphur" in English

At the end of antiquity (AD 600-700) a writer in Latin would have had two methods of writing the sound [f]: as f or ph. In the word for sulphur the spelling with an f became established in all the modern Romance languages: Italian *solfo*, Old Spanish *cufre*, Spanish

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Brimstone was a favourite medication in sixteenth century Hades ("Punishment of Gluttony," from "The Art of Good Living and Good Dying." Paris, 1502.)

azufre, and Portuguese *xofre*. Only in English is the ph resolutely maintained in the written language of both scientific and biblical texts. In English alchemy sulphur became widely known as one of the primary components of the universe: that which could be transmuted from solid through liquid, fire and gas, then back to solid, remaining chemically unaltered. Gower in his alchemical text of 1390 listed sulphur as "the thridde of the fowre fundamental spirits," and Chaucer held it to be one of the four primary elements, the others being "mercure" (quicksilver), "ammoniac," and "orpiment" (arsenic trisulphide). A little later, in 1627, Bacon wrote in his *Natural Historie*:

> There bee two great families of things; you may terme them by severall names; sulphureous and murcuriall, which are the chymists words.

The widespread medical use of sulphur as an inflammable disinfectant, a laxative, sudorific, and a cure for a range of skin rashes dates to the work of these early pharmacists. In English its application in describing yellow colours is seen in the seventeenth and eighteenth centuries. The sulphur yellow butterfly probably claims first place on this list, followed by the sulphur bottom rorqual or whale (described later in 1851 in *Moby Dick*), and, more recently, the sulphur crested cockatoo. Across the atlantic the word may be found in an American dictionary of 1645, spelt "sulphur," and Thomas Jefferson describes the "sulphur springs" of Virginia in 1745. The *New Yorker* uses "sulphur" until at least 1922 without apology.

Transition to sulfur in science

American dictionaries in the twentieth century begin to record two spellings: Webster's first edition (1939) includes both, with all its text under the ph spelling; the second edition (1959) refers to the spelling with an f as a variant used by many American chemists; and the third edition has one spelling only and the text is given under "sulfur." The first change in the spelling as used by scientists may be traced to *Chemical Abstracts* of 1920, when "sulfatase" enzymes are given with an f. In 1924 the same journal discussed the "sulfa-" drugs, which were all spelt with an f and were patented as such. This led to widespread use of the alternative spelling: in 1937 the *Journal of the American Medical Association* described "sulfanilamide," in 1942 "sulfasoxidine," and in 1943 "sulfamerizine." The alternative spelling was recognised in the 1933 edition of the *Oxford English Dictionary*.

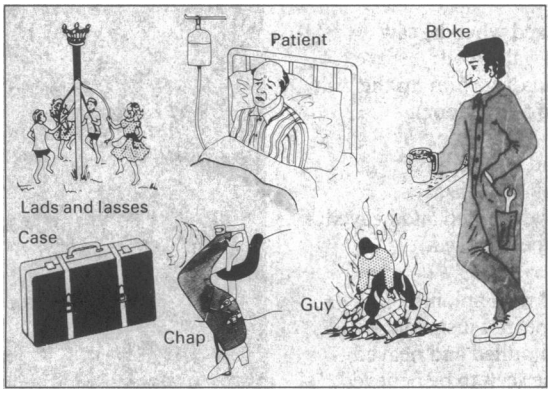
Possibly a Teutonic influence initiated the change in spelling through German involvement in the chemical industry of the United States in the 1920s (German *schwefel*, sulphur). Perhaps it originated in the American tabloids of that period, a source of many other changes in American spelling. The exact origin is hard to define, and a parallel change from ph to f is absent from other words. The ph spelling for the ancient Greek is widely used in American. From pheasants to phosphorous, phalanges to anaphylaxis, the aspirated ph is alive and well. Together with driving on the left, the use of ph in "sulphur," be it in acid rain or human metabolism, has remained an English prerogative. History suggests that it will be only a matter of time before an effete and luxurious Roman *h* is discarded and "sulphur" will be transmuted to bare "sulfur" at the touch of a key—or even by the alchemist's mouse.

1 Onions CT, Friedrichsen GWS, Burchfield RW. *Oxford English dictionary of etymology*. Oxford: Clarendon Press, 1966.
2 Ennius. *Annals*. 260.
3 Klein L, ed. *A comprehensive etymological dictionary of the English language*. Amsterdam: Elsevier, 1967.
4 Homer. *Odyssey*. xxii:481.
5 Cicero. *Poems*. 84.
6 Catullus. *Orator*. 160.
7 Allen WS. *Vox Graeca*. Cambridge: Cambridge University Press, 1974:21-4.

How's your form of address going matey! Orright?

Hugh Dudley, Lynne Baker

Are we alone in feeling acutely uncomfortable when either a student or one of our colleagues uses a colloquialism instead of a formal word of address to indicate a patient? At a recent final examination a fellow examiner frequently referred—sometimes in front of the patient—to "this chap," "this bloke," or "that guy." The students, taking him as their role model, did likewise. In one of our surgical teams there is a senior registrar whose favourite form of address is to refer to a "lad" or a "lass," irrespective of the patient's age. We have yet to hear "squire," "guv," or "mate" but do not think that they can, at the present rate of going, be far away. In some ways the most inconsiderate is the use of a Christian name without permission. Commonly it occurs when the old are addressed by the young and we get the impression that the use of Lynne or Hugh by a house surgeon in his 20s implies a prefix of Looney to the one and Hapless to the other. It is certainly demeaning.



Perhaps it is just our upbringing and the era through which we have lived that makes us feel that if we were the patient in the bed we would not like the surgical team to come along and refer to this "old bloke with prostatism" or "that fellow suffering from senile dementia." If we had the latter probably *we* wouldn't care though our relatives might.

Because we think that being a professional necessitates a certain formality in approach we try—though it is a losing battle—to forbid these forms of address in our own service. We suspect that our juniors think that we are stuffed shirts from a previous generation but it is striking that well disciplined and successful groups in other fields—the crew of an aircraft or an infantry platoon, to take two examples—have the same formality in their approach. We use the figure with our students and clinical teams to remind us of the need to preserve some dignity in our forms of address. It also serves to illustrate how ambiguous much of our language is and how this should be avoided in medicine as in any other discipline where precision of expression is required. It does imply, however, a basic vocabulary and perhaps we should not have been surprised when most of those we have shown it to do not know or had forgotten that the protective leather worn on the legs by a cowboy is a "chap."

Academic Surgical Unit, St Mary's Hospital, London W2 1NY
Hugh Dudley, FRCSE, *emeritus professor*

Department of Surgery, University of Natal, Durban, Republic of South Africa
Lynne Baker, FRCSE, *professor and chairman*

Correspondence to:
Professor Dudley.